

Amendments to the Claims

Claim 1 (Currently amended): A method of treatment for anxiety or an anxiety post-traumatic stress disorder comprising:
administering to a patient in need thereof a therapeutically effective amount of an acid sensing ion channel (ASIC) antagonist and a pharmaceutically acceptable carrier, wherein said antagonist causes improved fear responses.

Claim 2 (Original): The method of claim 1 wherein the ASIC antagonist is an acid-sensing ion channel 1 (ASIC1) receptor antagonist.

Claim 3 (Original): The method according to claim 1 wherein said acid sensing ion channel (ASIC) antagonist and said pharmaceutically acceptable carrier is administered by a route selected from the group consisting of: orally, topically, sublingually, buccally, intranasally, rectally and intravenously.

Claim 4 (Withdrawn): The method of claim 1 wherein said anxiety or anxiety disorder is selected from the group consisting of:
generalized anxiety disorder, panic anxiety, obsessive compulsive disorder, social phobia, performance anxiety, post-traumatic stress disorder, acute stress reaction, adjustment disorders, hypochondriacal disorders, separation anxiety disorder, agoraphobia and specific phobias.

Claim 5 (Withdrawn): A method of treatment for drug addiction comprising: administering to a patient in need thereof a therapeutically effective amount of an acid sensing ion channel (ASIC) antagonist and a pharmaceutically acceptable carrier.

Claim 6 (Withdrawn): The method of claim 5 wherein the ASIC antagonist is an acid-sensing ion channel 1 (ASIC1) receptor antagonist.

Claim 7 (Withdrawn): The method according to claim 5 wherein said acid sensing ion channel (ASIC) antagonist and said pharmaceutically acceptable carrier is administered by a route selected from the group consisting of: orally, topically, sublingually, buccally, intranasally, rectally and intravenously.

Claim 8 (Withdrawn): The method of claim 5 wherein said drug addiction is selected from the group consisting of: addiction to alcohol, amphetamine, cocaine, heroin, inhalants, morphine, nicotine, opiates, psychoactive drugs, compulsive disorder, depression, headache, and drug or alcohol related withdrawal symptoms.

Claim 9 (Withdrawn): A method of treatment for fear conditioning comprising: administering to a patient in need thereof a therapeutically effective amount of an acid sensing ion channel (ASIC) agonist and a pharmaceutically acceptable carrier.

Claim 10 (Withdrawn): The method of claim 9 wherein the ASIC agonist is an acid-sensing ion channel 1 (ASIC1) receptor agonist.

Claim 11 (Withdrawn): A method according to claim 9 wherein said acid sensing ion channel (ASIC) agonist and said pharmaceutically acceptable carrier is administered by a route selected from the group consisting of: orally, topically, sublingually, buccally, intranasally, rectally and intravenously.

Claim 12 (Withdrawn): A drug screening protocol method for identifying therapeutic agents for the treatment of anxiety, an anxiety disorder or drug addiction comprising: providing an assay to determine modulation of the acid-sensing ion channel (ASIC) antagonist wherein the therapeutic agent deactivates the acid-sensing ion channel; introducing to said assay a compound suspected of being an ASIC antagonist; and determining whether ASIC modulation occurs wherein the therapeutic agent that modulates the level of expression of the acid-sensing ion channel is a candidate for the treatment of anxiety, anxiety disorders or drug addiction.

Claim 13 (Withdrawn): The method of claim 12 wherein the ASIC antagonist is an acid-sensing ion channel 1 (ASIC1) receptor antagonist.

Claim 14 (Withdrawn): The method of claim 12 wherein the assay to determine modulation of the acid-sensing ion channel (ASIC) is composed of cells that modulate the binding of an acid-sensing ion channel thereby inhibiting ASIC receptors.

Claim 15 (Withdrawn): A drug screening protocol method for identifying therapeutic agents for the treatment of fear conditioning comprising:
providing an assay to determine modulation of the acid-sensing ion channel (ASIC) agonist
wherein the therapeutic agent activates the acid-sensing ion channel;
introducing to said assay a compound suspected of being an ASIC agonist; and
determining whether ASIC modulation occurs wherein the therapeutic agent that modulates the level of expression of the acid-sensing ion channel is a candidate for the treatment of fear conditioning.

Claim 16 (Withdrawn): The method of claim 15 wherein the ASIC antagonist is an acid-sensing ion channel 1 (ASIC1) receptor agonist.

Claim 17 (Withdrawn): The method of claim 15 wherein the assay to determine modulation of the acid-sensing ion channel (ASIC) is composed of cells that modulate the binding of an acid-sensing ion channel thereby activating ASIC receptors

Claim 18 (Withdrawn): A pharmaceutical composition for treatment of anxiety or an anxiety disorder comprising:
an acid-sensing ion channel 1 (ASIC1) receptor antagonist and a pharmaceutically acceptable carrier.

Claim 19 (Withdrawn): The pharmaceutical composition of claim 18 wherein said pharmaceutically acceptable carrier is selected from the group consisting of: a carrier, diluent, excipient, wetting agent, buffering agent, suspending agent, lubricating agent, adjuvant, vehicle, delivery system, emulsifier, disintegrant, absorbent, preservative, and surfactant suitable for use in said pharmaceutical composition.

Claim 20 (Withdrawn): A pharmaceutical composition for treatment of drug addiction comprising: an acid-sensing ion channel 1 (ASIC1) receptor antagonist and a pharmaceutically acceptable carrier.

Claim 21 (Withdrawn): The pharmaceutical composition of claim 20 wherein said pharmaceutically acceptable carrier is selected from the group consisting of: a carrier, diluent, excipient, wetting agent, buffering agent, suspending agent, lubricating agent, adjuvant, vehicle, delivery system, emulsifier, disintegrant, absorbent, preservative, and surfactant suitable for use in said pharmaceutical composition

Claim 22 (Withdrawn): A pharmaceutical composition for treatment of fear conditioning comprising: an acid-sensing ion channel 1 (ASIC1) receptor agonist and a pharmaceutically acceptable carrier.

Claim 23 (Withdrawn): The pharmaceutical composition of claim 22 wherein said pharmaceutically acceptable carrier is selected from the group consisting of: a carrier, diluent, excipient, wetting agent, buffering agent, suspending agent, lubricating agent, adjuvant, vehicle, delivery system, emulsifier, disintegrant, absorbent, preservative, and surfactant suitable for use in said pharmaceutical composition

Claim 24 (Currently amended): A method of treating a disease state associated with increased pH which comprises: administering to a patient a therapeutically effective amount of an acid sensing ion channel (ASIC) antagonist capable of improving fear responses and a pharmaceutically acceptable carrier.

Claim 25 (Currently amended): The method of claim 24 wherein the disease state is an the anxiety condition selected from the group consisting of: generalized anxiety disorder, panic anxiety, obsessive-compulsive disorder, social phobia, performance anxiety, of post-traumatic stress disorder, acute stress reaction, adjustment disorders, hypochondriacal disorders, separation anxiety disorder, agoraphobia and specific phobias.

Claim 26 (Withdrawn): The method of claim 24 wherein the disease state is a drug addiction selected from the group consisting of:
addiction to alcohol, amphetamine, cocaine, heroin, inhalants, morphine, nicotine, opiates,
psychoactive drugs, compulsive disorder, depression, headache, and drug or alcohol related withdrawal symptoms.

Claim 27 (Withdrawn): A method of preparing a pharmaceutical composition for treatment of anxiety or an anxiety disorder associated with a function of acid sensing ion channel 1 ASIC1, the method comprising:

- (a) identifying a compound that modulates ASIC1;
- (b) synthesizing the identified compound; and
- (c) incorporating the compound into a pharmaceutical carrier.

Claim 28 (Withdrawn): A method of preparing a pharmaceutical composition for treatment of a drug addiction associated with a function of acid sensing ion channel 1 ASIC1, the method comprising:

- (a) identifying a compound that modulates ASIC1;
- (b) synthesizing the identified compound; and
- (c) incorporating the compound into a pharmaceutical carrier.

Claim 29 (Withdrawn): A method of preparing a pharmaceutical composition for treatment of fear conditioning associated with a function of acid sensing ion channel 1 ASIC1, the method comprising:

- (a) identifying a compound that modulates ASIC1;
- (b) synthesizing the identified compound; and
- (c) incorporating the compound into a pharmaceutical carrier.

Claim 30 (Currently amended): A method of treating a CNS disorder characterized by a change in extracellular pH in the amygdala comprising:

inhibiting the acid-sensing ion channel 1 (ASIC1) ~~channel in order to improve fear responses in~~
a patient in need of such treatment.

Claim 31 (Currently amended): The method of claim 30 wherein said CNS disorder is ~~selected from the group consisting of:~~

~~generalized anxiety disorder, panic anxiety, obsessive compulsive disorder, social phobia, performance anxiety, post-traumatic stress disorder, acute stress reaction, adjustment disorders, hypochondriacal disorders, separation anxiety disorder, agoraphobia, specific phobias, addiction to alcohol, amphetamine, cocaine, heroin, inhalants, morphine, nicotine, opiates, psychoactive drugs, compulsive disorder, depression, headache, and drug or alcohol related withdrawal symptoms.~~